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Adjusting to Normal Times

It is now clear that the 20 years from 1946 to 1966, during which federal funds for research and development doubled nearly four times, were really quite abnormal in the way that the golden ages of Greece or Florence were abnormal in their cultures. The scientific world must now carry on, in ways more appropriate to sterner times, what was best about the age just past.

It is characteristic of golden ages to be presided over by small elites of unusual vision and vigor, and ours was no exception. The budget for science was developed each year by a small number of presidential advisers in the White House and in what is now called the Office of Management and Budget. The budget was defended by representatives of a few universities, the National Academy of Sciences, and certain other private groups, and the funds were appropriated through the good offices of an equally small number of informed and devoted congressional leaders. Much has changed in the last 5 or 6 years. In terms of constant dollars, funds for all levels of research have actually declined. The emphasis is swinging away from aerospace and toward more earthy considerations, away from building up the infrastructure of science and toward the solution of immediate problems.

To a considerable but not accurately known extent, the people, the Congress, and the executive have lost confidence in the scientific establishment and its governing elite. The long series of reports from the National Academy of Sciences on the present state and foreseeable needs of science, painstaking and thorough though they were, may actually have been counterproductive, with their undeniable odor of special pleading for more of the same. In any case, time alone is enough to change the faces of White House advisers and even of congressional committees.

It's a new ball game, and the scientific world might well give more thought to how to play it. If that world no longer enjoys the prestige that a Bush or a Conant brought with him out of the war, it has what they did not have, a large army of scientists deployed through every state in the Union in an educational and research network such as the world has never seen. For various reasons, most of which are not their fault, these members of the rank and file, and even many of the institutions which they serve, have never learned how to make themselves felt in the positive determination of science policy. For example, nothing is clearer than that congressmen listen to their constituents; but how many working scientists ever speak to them? There is at least one exception to the prevailing reticence. High school teachers of science do talk to congressmen, and year after year the appropriations committee restores to the National Science Foundation the funds for the summer institutes for high school teachers which the executive would like to take away.

The fading away of the *ancien régime* provides an opportunity for the silent majority to make themselves heard, and the AAAS could more effectively advance science if it found how to "raise the consciousness" of that majority and give it a firmer voice.—ROBERT S. MORISON, *Program on Science, Technology and Society, Cornell University, Ithaca, New York 14850*